

The claims have been amended to more particularly point out and distinctly claim the novel features of the present invention. These amendments are made in the interest of speedy prosecution of this application and without prejudice to applicants right to prosecute claims of broader or different scope in a continuing application.

The claims have been amended to provide proper antecedent basis for the recitations objected to in the Paragraph 2 of the Office Action, with the exception of the objection to the recitation "the group" as recited in claims 17 and 18. The recitation, "the group" is acceptable Markush claim language, which is proper in this case. (See, for example, MPEP §2173.05(h)(a), page 2100-133, column 1, lines 30-34.)

The present invention is directed to a method of making a seamless metal tube by elongating an assembly of a tube blank and a metal core by mechanical working, and then stretching the core plastically so that it diminishes in diameter sufficiently to permit its removal from the tube. A key feature of the present invention is that the center core is subjected to a treatment resulting in the core being in a stable stretched condition throughout its length, while not substantially stretching the tube.

None of the prior art discloses or suggests a process for making a metal tube which comprises elongating an assembly including a metal tube blank and an elongate metal core by mechanical working and then subjecting the core to a treatment which stretches the core, but does not substantially stretch the tube, such that the stretched core can be removed from the tube, as recited in claim 1. None of the prior art discloses or suggests treatment of a center core which would result in deformation of the core, without also causing substantial deformation of the outer tube.

Takamura et al discloses a process for producing a tubular body by forced plastic deformation. Billet 10 of Takamura et al includes intermediate salt core 11,

a sheath pipe 12 and a center core 13, as described at column 3, lines 28-31. While the billet of Takamura et al is subjected to plastic deformation, this reference does not disclose or suggest the present invention. On the contrary, the entire billet 10 of Takamura et al is subjected to plastic deformation. This includes *both* center core 13 and sheath pipe 12. The center core of Takamura et al is not surrounded and contacted by the tube as recited in claim 1 and is not subjected to a treatment which (i) results in the core being in a stable stretched condition throughout its length, and (ii) does not substantially stretch the tube, as is also recited in claim 1. It is not proper to "equivocate [sic] applicant's core's 'stretched condition' to that of Takamura et al.'s plastically deformed billet" as set forth on page 3 of the Office Action because *the plastic deformation of the Takamura et al assembly includes deformation of both center core 13 and outer pipe 12, rather than applicants' method which recites that the tube is not substantially stretched.* Takamura et al includes an intermediate salt core 11, made of easily soluble compound salt, which is used as a filler between center core 13 and sheath pipe 12. Intermediate core 11 is removed from the rod through solution. Simultaneously with removal of the intermediate core, the center core portion is drawn out. This is unlike the method of the present invention, which requires that the core be stretched and does not employ an intermediate core between the metal tube and the inner core. Thus, Takamura et al does not anticipate the pending claims and claim 1 along with dependent claims 2-21 are allowable.

The deficiencies of Takamura et al are not solved by the disclosures of Thiruvarudchelvan, Ohashi et al, or any of the remaining prior art of record. Thiruvarudchelvan does not disclose or suggest a billet with a center core and a tube surrounding the center core. The Thiruvarudchelvan billet is a solid sample. Thiruvarudchelvan does not disclose or suggest treatment of a center core which would result in deformation of the core, without also causing deformation of the outer tube. Thus, the combination of Takamura et al and Thiruvarudchelvan does not teach the present invention, as is now claimed.

CONCLUSION

In view of the foregoing, applicants believe all claims pending in this application are now in condition for allowance. If it is believed that a telephone conference would expedite prosecution of this application, the Examiner is invited to telephone the undersigned at 415/361-3331.

Respectfully submitted,



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